

INFORMATION DISCLOSURE CITATION

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ATTY DOCKET NO.
2002US304

SERIAL NO.
10/042,878

Mark O. NEISSER et al.

FILING
January 9, 2002

GROUP
1756

NOV 09 2005

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
ny	4,491,628	1/1/1985	Ito et al.	430	176	
	4,521,274	6/4/1985	Reichmanis et al.	216	47	
	5,069,997	5/16/1989	Schwalm et al.	430	270.1	
	5,350,660	9/27/1994	Urano et al.	430	170	
	5,354,643	10/11/1994	Cabrera et al.	430	270.1	
	5,389,491	2/14/1995	Tani et al.	430	170	
	5,419,991	5/30/1995	Segawa	430	20	
	5,581,730	12/3/1996	Silla	711	144	
	5,585,219	12/17/1996	Kaimoto et al.	430	270.1	
ny	5,693,691	12/2/1997	Flaim et al.	523	436	
ny	5,716,756	2/10/1998	Pawlowski et al.	430	270.1	

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
ny	JP 5-107770	4/30/1993	JAPAN	—	—	✓	
ny	JP 7-159997	6/23/1995	JAPAN	—	—	✓	
ny	JP 7-181687	7/21/1995	JAPAN	—	—	✓	
ny	JP 8-286384	11/1/1996	JAPAN	—	—	✓	
ny	JP 9-205057	8/5/1997	JAPAN	—	—	✓	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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Michael W. ...

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ny	5,731,386	3/24/1998	Thackeray et al.	525	328.2	
	5,763,135	6/9/1998	Ding et al.	430	191	
	5,763,954	6/9/1998	Hyakutake	257	774	
	5,795,701	8/18/1998	Conley et al.	430	325	
	5,871,730	12/22/1998 2/11/1999	Thackeray et al. Brzezinski et al.	424	94.61	
	5,851,738	12/22/1998	Thackeray et al.	430	327	
	5,880,169	3/9/1999	Osawa et al.	522	25	
	5,882,996	3/16/1999	Dai	438	597	
	5,886,102	3/23/1999	Sinta et al.	525	154	
Y	5,928,837	7/27/1999	Sato et al.	430	270.1	
hm	5,935,760	8/10/1999	Shao et al.	430	271.1	

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	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
ny	JP 10-301268	11/13/1998	JAPAN				
ws	DE 39 30 086	3/21/1991	GERMANY				
ny	DE 39 30 087	3/14/1991	GERMANY				
ny	DE 41 12 967	10/22/1992	GERMANY				
ny	EP 0 583 205	2/16/1994	EUROPE				

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h	5,994,006	11/30/1999	Nishi	4130	22	
h	6,110,641	8/29/2000	Trefonas, III et al.	4130	270.1	
	6,110,653	8/29/2000	Holmes et al.	4130	325	
	6,316,165	11/13/2001	Pavelchek et al.	4130	311	
	6,319,651	11/20/2001	Holmes et al.	4130	270.1	
	6,322,948	11/27/2001	Jung et al.	4130	270.1	
	6,329,117	12/11/2001	Padmanaban et al.	4130	270.1	
	2003/0104322	6/5/2003	Yamashita et al.	4130	331	
	2003/0129531	7/10/2003	Oberlander et al.	4130	271.1	
	2003/0215736	11/20/2003	Oberlander et al.	4130	270.1	
h	2004/0013971	1/22/2004	Berger et al.	4130	270.1	

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	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
h	EP 0 794 458	9/10/1997	EUROPE				
h	EP 0 905 565	3/31/1999	EUROPE				
h	GB 2 320 718	7/1/1998	UNITED KINGDOM				
h	GB 2 354 763	4/4/2001	UNITED KINGDOM				
h	WO 97/33198	9/12/1997	WIPO				

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WJ	5,286,867	2/15/1994	Lohaus et al.	546	249	
WJ	5,338,641	8/16/1994	Pawlowski et al.	430	145	
WJ	5,340,682	8/23/1994	Pawlowski et al.	430	145	

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	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
WJ	JP 2000-171604	6/23/2000	JAPAN				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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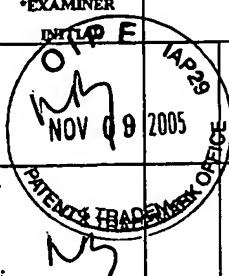
Wickham

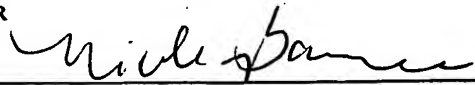
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INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>		Docket Number (Optional) 2004US304	Application Number 10/042,878
		Applicant(s) Mark O. NEISSER et al.	
		Filing Date January 9, 2002	Group Art Unit 1756

*EXAMINER	OTHER DOCUMENTS	(Including Author, Title, Date, Pertinent Pages, Etc.)
	M	Bather et al., "Titanium Nitride Oxide (TiN _x O _y) as a Barrier Between Chromium-Silicon-Oxygen (Cr-Si-O) and Aluminium Thin Films", Thin Solid Films Vol. 200, pages 93 - 116 (1991).
	M	Cho et al., "Negative tone 193 nm resists", SPIE Vol. 3999, pages 62 - 73 (2000).
	M	Choi et al., "Design and Synthesis of New Photoresist Materials for ArF Lithography", SPIE Vol. 3999, pages 54 - 61 (2000).
	M	Choi et al., "Improved Lithographic Performance of 193nm-Photoresists Based on Cycloolefin / Maleic Anhydride Copolymer by Employing Mixed PAGs", SPIE Vol. 4345, pages 94 - 105 (2001).
	M	Czech et al., "Reduction of Linewidth Variation for the Gate Conductor Level by Lithography Based on a New Antireflective Layer", Microelectronic Engineering Vol. 21, pages 51 - 56 (1993).
	M	Fu et al., "Negative-tone Cycloolefin Photoresist for 193 nm Lithography", SPIE Vol. 4345, pages 751 - 760 (2001).
	M	Houlihan et al., "Chemically Amplified Resists: The Chemistry and Lithographic Characteristics of Nitrobenzyl Benzenesulfonate Derivatives", Journal of Photopolymer Science and Technology Vol. 3, No. 3, pages 259 - 273 (1990).
	M	Ito, "Chemically Amplified Resists: Past, Present, and Future", SPIE Vol. 3678, pages 2 - 12 (March 1999).
	M	Iwasa et al., "Novel negative photoresist based on polar alicyclic polymers for ArF excimer laser lithography", SPIE Vol. 3333, pages 417 - 424 ().
	M	Naito et al., "Negative-type chemically amplified resists for ArF excimer laser lithography", SPIE Vol. 3333, pages 503 - 511 ().
M	Nölscher et al., "High contract single layer resists and antireflection layers - an alternative to multilayer resist techniques", SPIE Vol. 1086, pages 242 - 250 (1989).	
M	Richter et al., "Negative Tone Resist for Phase-Shifting Mask Technology: A Progress Report", SPIE Vol. 3999, pages 91 - 101 (2000).	

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<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; color: black; font-weight: bold; font-size: 0.8em;"> NOV 09 2005 PATENT & TRADEMARK OFFICE </div> </div>	Rushkin et al., "New Polymers for 193 nm Single Layer Resists Based on Substituted Cycloolefins/Maleic Anhydride Resins", SPIE Vol. 3678, pages 44 - 50 (March 1999).
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; color: black; font-weight: bold; font-size: 0.8em;"> NOV 09 2005 PATENT & TRADEMARK OFFICE </div> </div>	Schlegel et al., "Studies on the Acid Formation and Deprotection Reaction by Sovel Sulfonates in a Chemical Positive Photoresist", Journal of Photopolymer Science and Technology Vol. 3, No. 3, pages 281 - 287 (1990).
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; color: black; font-weight: bold; font-size: 0.8em;"> NOV 09 2005 PATENT & TRADEMARK OFFICE </div> </div>	Shida et al., "193-nm Single Layer Resists Based on Advanced Materials", SPIE Vol. 4345, pages 87 - 93 (2001).
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; color: black; font-weight: bold; font-size: 0.8em;"> NOV 09 2005 PATENT & TRADEMARK OFFICE </div> </div>	Shirai et al., "Photochemistry of Imino Sulfonate Compounds and Their Application to Chemically Amplified Resists", Journal of Photopolymer Science and Technology Vol. 3, No. 3, pages 301 - 304 (1990).
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; color: black; font-weight: bold; font-size: 0.8em;"> NOV 09 2005 PATENT & TRADEMARK OFFICE </div> </div>	Yamaoka et al., "Photochemical Dissociation of p-Nitrobenzyl Aromatic Sulfonate and Its Application to Chemical Amplification Resists", Journal of Photopolymer Science and Technology Vol. 3, No. 3, pages 275 - 280 (1990).
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; color: black; font-weight: bold; font-size: 0.8em;"> NOV 09 2005 PATENT & TRADEMARK OFFICE </div> </div>	Yokoyama et al., "ArF Negative Resist System Using Androsterone Structure with 6-Hydroxy Acid for 100-nm Phase-Shifting Lithography", SPIE Vol. 4345, pages 58 - 66 (2001).
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; color: black; font-weight: bold; font-size: 0.8em;"> NOV 09 2005 PATENT & TRADEMARK OFFICE </div> </div>	Yokoyama et al., "Effect of Comonomer Structure on Dissolution Characteristics: ArF Negative Resist System Using Androsterone Derivative with 7-Hydroxy Acid", Journal of Photopolymer Science and Technology Vol. 14, No. 3, pages 393 - 400 (2001).
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; color: black; font-weight: bold; font-size: 0.8em;"> NOV 09 2005 PATENT & TRADEMARK OFFICE </div> </div>	Copy of Official Action (and English translation thereof) for JP Application No. Hei-10-186575.
<div style="position: relative; height: 100px;"> <div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; border: 1px solid black; border-radius: 50%; text-align: center; color: black; font-weight: bold; font-size: 0.8em;"> NOV 09 2005 PATENT & TRADEMARK OFFICE </div> </div>	English Language abstract of 2000-171604.

EXAMINER <div style="font-family: cursive; font-size: 1.2em;"> Michelle Pan </div>	DATE CONSIDERED <div style="font-family: cursive; font-size: 1.2em;"> 1/20/02 </div>
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